

Work Order ID 134896

Wednesday, July 22, 2015 4:15:22 PM

134896

Page 1

Item ID: D3049-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bearpaw
 Start Date: 7/22/15 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 7/22/15 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: MCS Date: JUL 23 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3049	Rev A1								

110 0.00

110

Waterjet
FLOW CNC Waterjet

Memo 0.03
CUT BLANK AS PER FILE D3049-1_BLANK

(4) 12/15/08/12

120 0.00

120

HAAS 1
HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

Memo 0.05
1-Inspect material for defects or damage prior to machining
2-Machine as per Folio FA165 and Dwg D3049Identify as D3049-1
3-Deburr

4 15/09/15

130 0.00

130

QC
Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo 0.00

4 15/09/15

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 134896

Wednesday, July 22, 2015 4:15:22 PM

134896

Page 2

Item ID: D3049-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bearpaw

Stop

NS2

Start Date: 7/22/15

Start Qty: 4.00

4

Cust Item ID:

Required Date: 7/22/15

Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

QC8- Inspect parts - second check

0.00

140

QC

Memo

0.00

Quality Control

4

0

DAS

44

9-89

15/09/15

170

Identify as per dwg & Stock Location:

0.00

170

Packaging

Packaging

Memo

0.00

Packaging

4

DAS

6

9-89

SEP 15 2015

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.01

Quality Control

MLJ

SEP 15 2015

20150915

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
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Past Expiry Date ☐	Manufacturing Process ☐																								
Misidentified ☐	Past Due ☐	OTHER : _____																							

Picklist Print

Wednesday, July 22, 2015 4:15:22 PM

Page 1

Work Order ID: 134896

134896

Parent Item: D3049-1

D3049-1

Parent Item Name: Bearpaw

Start Date: 7/22/15

Required Date: 7/22/15

Start Qty: 4.00

Required Qty: 4.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased		No		120	sf	281.5810	3.4	13.6			

MUHMWB10

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

07/15/15

Location

Loc Qty

Loc Code

MAT

225.714

m131661

43.514

m132063

182.2

MAT018

55.867

m131335

55.867

14.2

DQA: _____ Date: _____



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DART AEROSPACE LTD		Work Order: 134896
Description: Bearpaw		Part Number: D3049-1
Inspection Dwg: D3049	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	Ø0.260	+0.005/-0.000	0,260	✓		MJP-04	vern
B	0.93	+/-0.030	0,930	✓		...	...
C	0.40	+0.030/-0.000	0,420	✓		MJP-08	Dial depth Mic
D	2.00	+/-0.030	1,996	✓		MJP-04	vern
E	10.250	+/-0.010	10,250	✓		...	...
F	4.540	+/-0.030	4,540	✓		↓	↓
G	5.88	+/-0.030	5,880	✓			
H	0.38	+/-0.030	0,380	✓			
I	11.50	+/-0.030	11,500	✓			
J	0.07 x 45°	+0.030/-0.010	0,050 x 45°	✓		MJP-07	Tape
K	0.44 - 0.47	+/-0.000	0,447	✓		MJP-04	vern
L	R0.25	+/-0.030	0,250	✓		...	...
M	0.38	+/-0.010	0,385	✓		—	Rodica gauge
N	0.95	+0.030/-0.010	0,965	✓		MJP-04	vern
O	0.69	+/-0.030	0,700	✓		...	...
P	0.20	+/-0.030	0,208	✓			
Q	23.00	+/-0.030	23,00	✓		MJP-08	Dial depth Mic
R	0.25 x 45°	+/-0.030	0,260 x 45°	✓		MJP-07	Tape
						MJP-04	vern

DAS

Measured by: <i>[Signature]</i>	Audited by: 44 9-89	Prototype Approval:	N/A
Date: 15/09/15	Date: 15/09/15	Date:	N/A

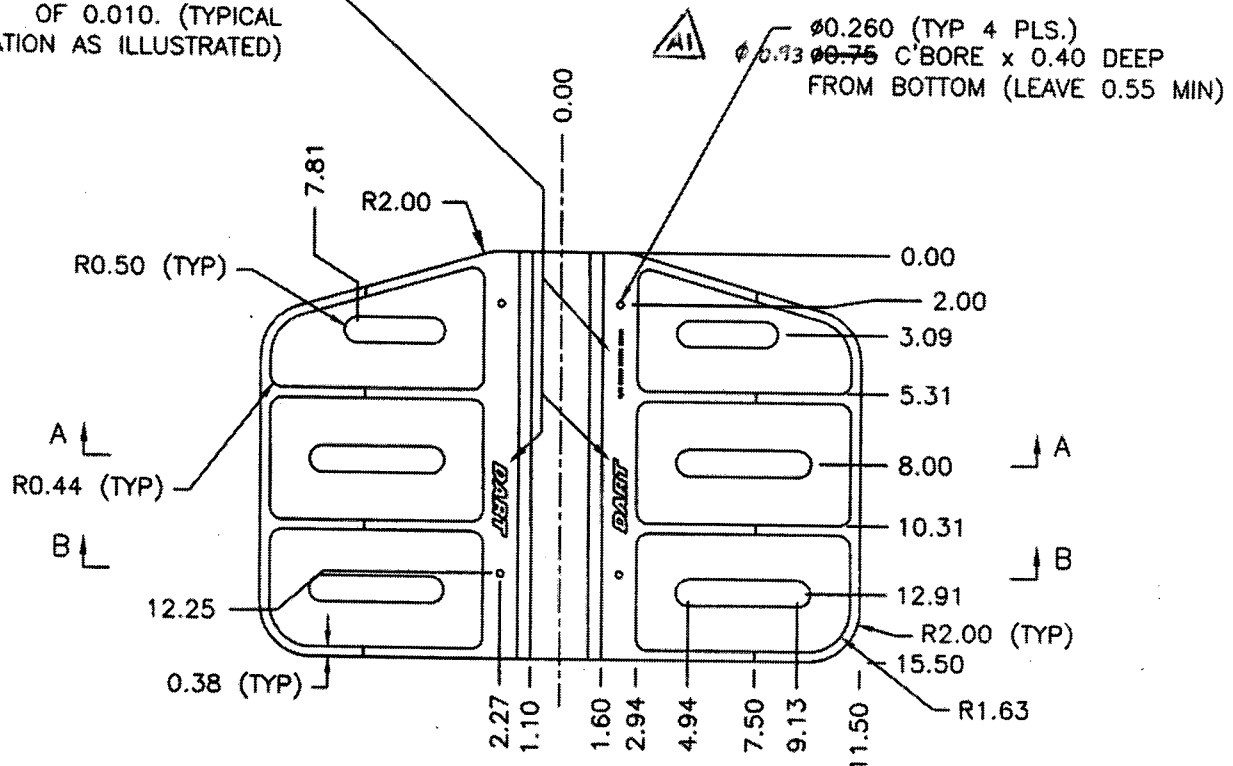
Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O D135-692-011	KJ/RF	
B	08.05.06	Dimension I revised	KJ/DD <i>[Signature]</i>	<i>[Signature]</i>



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3049	REV. A SHEET 1 OF 2
DATE 01 10.18		TITLE BEARPAW	SCALE 1:7
A	01.10.18	NEW ISSUE	
AI	# RF 03.01.13	$\phi 0.93$ WAS $\phi 0.75$	

RELEASED
01.10.24

ENGRAVE DART LOGO TO
MAX DEPTH OF 0.012.
ENGRAVE PART AND BATCH
NUMBERS TO MAX DEPTH
OF 0.010. (TYPICAL
LOCATION AS ILLUSTRATED)



D3049-1 BEARPAW

NOTES:

- 1) BEARPAW IS SYMMETRIC ABOUT CENTER LINE
- 2) MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689, 1.00" THICK (MACHINE TO 0.950)

13489645
1507-23

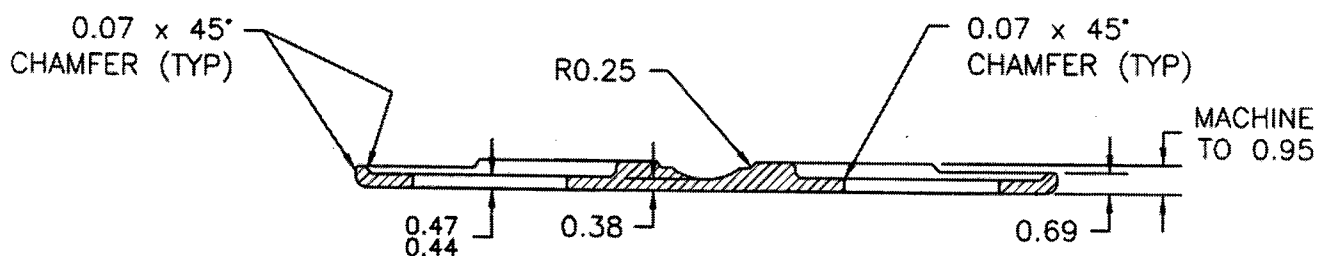
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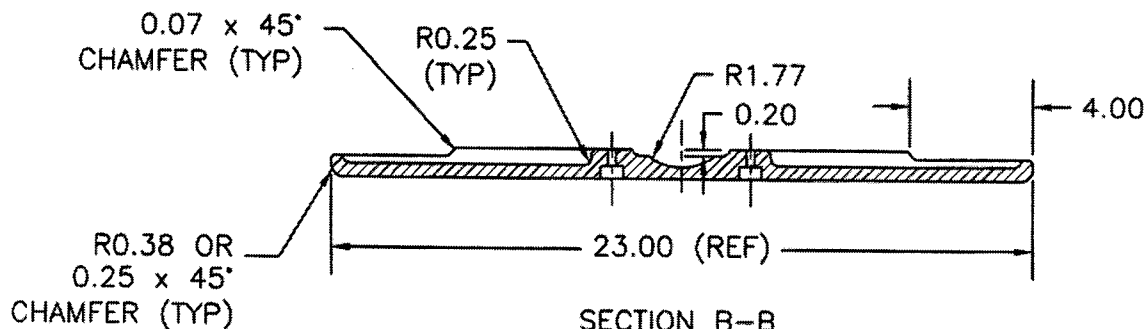


DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3049	REV. A SHEET 2 OF 2
DATE 01.10.18		TITLE BEARPAW	SCALE 1:6

RELEASED
01.10.24



SECTION A-A



SECTION B-B

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